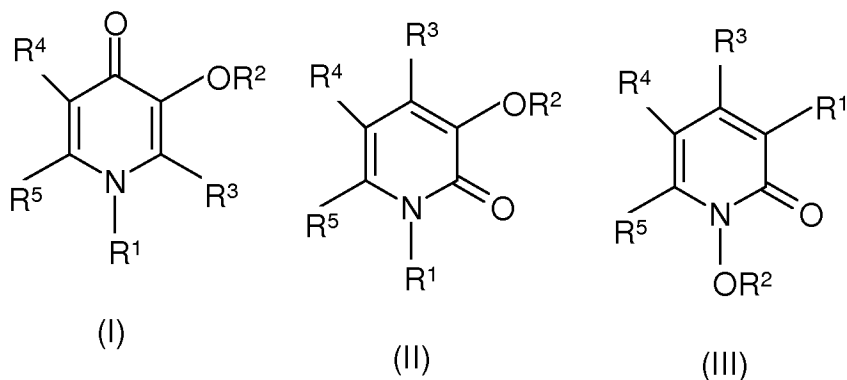


Claims:

1. **(Currently amended)** A method for treating a skin microcirculatory disorder (SMD) comprising topically administering to a patient in need thereof a hydroxypyridonone of formulae (I-III):



wherein

R¹ represents a (C₁-C₁₀)- alkyl, (C₁-C₁₀)-alkenyl, (C₁-C₁₀)-alkoxy, (C₁-C₁₀) hydroxyalkyl, (C₅-C₁₂) -aralkyl, (C₃-C₁₂)-cycloalkyl, (C₁-C₈)- carboalkoxy or (C₁-C₈)- carbamyl, or a (C₁₀-C₃₀)-peptide , or a (C₃-C₆) polyol or monosaccharide;

R² represents an hydrogen atom or a linear or branched, saturated or unsaturated lo (C₁-C₂₂)-acyl, optionally substituted by (C₁-C₈)-alkoxy, carboxy, (C₁-C₈) alkoxy carbonyl, amino, hydroxy, said amino and hydroxy being optionally (C₁-C₂₂)-acylated or - alkylated;

R³, R⁴ and R⁵, each individually, represent a hydrogen atom, or (C₁-C₁₀)-alkyl, (C₁-C₁₀)- alkenyl, (C₁-C₁₀)-alkoxy, (C₅-C₁₂ aryl) alkyl, (C₅-C₁₂)-cycloalkyl, (C₁-C₈ carbo)-alkoxy or (C₁-C₈)- carbamyl group;

with the proviso that both R¹ and R³ are not hydrogen;

or a dermatologically/cosmetically acceptable salt thereof.

2. **(Previously presented)** A method according to claim 1, wherein the skin microcirculatory disorder (SMD) is rosacea.

3. **(Previously presented)** A method according to claim 1, wherein the skin microcirculatory disorder (SMD) is cutaneous vasculitis.

4. **(Previously presented)** A method according to claim 1, wherein the skin microcirculatory disorder (SMD) is actinic purpura.

5. **(Previously presented)** A method according to claim 1, wherein the skin microcirculatory disorder (SMD) is a skin capillaritis.

6. **(Previously presented)** A method according to claim 8, wherein the skin capillaritis is, purpura annularis telangiectodes, contact allergy skin capillaritis, itching purpura, or eczematid-like purpura.

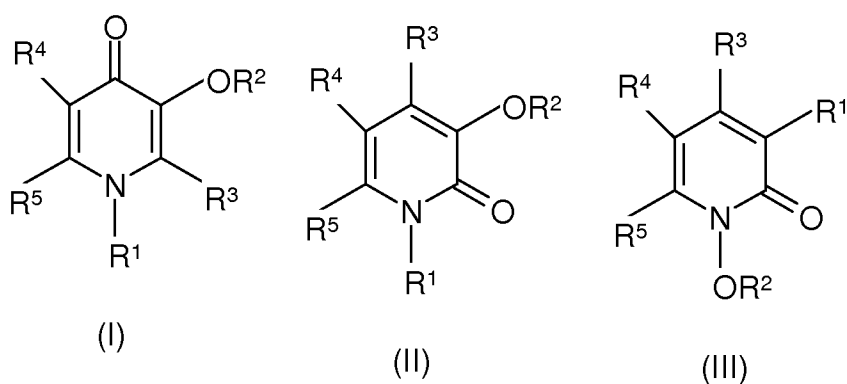
7. **(Cancelled)**

8. **(Withdrawn)** A method according to claim 1, wherein R^1 and R^2 are methyl, R^3 and R^4 are hydrogens.

9. **(Withdrawn)** A method according to claim 1, wherein R^1 and R^2 are ethyl R^3 and R^4 are hydrogens.

10. (**Withdrawn**) A method according to claim 1, wherein R^1 is $\text{CH}_2\text{CH}_2\text{OH}$, R^2 is methyl or ethyl, and R^3 and R^4 are hydrogens.

11. (**Currently amended**) A method for the treatment of skin microcirculatory disorder (SMD) comprising locally applying to a mammal in need thereof of a therapeutically effective amount of hydroxypyridonone compound of formulae (I-III):



wherein

R^1 represents a $(\text{C}_1\text{-C}_{10})$ - alkyl, $(\text{C}_1\text{-C}_{10})$ -alkenyl, $(\text{C}_1\text{-C}_{10})$ -alkoxy, $(\text{C}_1\text{-C}_{10})$ hydroxyalkyl, $(\text{C}_5\text{-C}_{12})$ -aralkyl, $(\text{C}_3\text{-C}_{12})$ -cycloalkyl, $(\text{C}_1\text{-C}_8)$ - carboalkoxy or $(\text{C}_1\text{-C}_8)$ - carbamyl, or a $(\text{C}_{10}\text{-C}_{30})$ -peptide or a $(\text{C}_3\text{-C}_6)$ polyol or monosaccharide;

R^2 represents an hydrogen atom or a linear or branched, saturated or unsaturated $(\text{C}_1\text{-C}_{22})$ -acyl, optionally substituted by $(\text{C}_1\text{-C}_8)$ -alkoxy, carboxy, $(\text{C}_1\text{-C}_8)$ alkoxy carbonyl, amino, hydroxy, said amino and hydroxy being optionally $(\text{C}_1\text{-C}_{22})$ -acylated or - alkylated;

R^3 , R^4 and R^5 , each individually, represent a hydrogen atom, or $(\text{C}_1\text{-C}_{10})$ -alkyl, $(\text{C}_1\text{-C}_{10})$ - alkenyl, $(\text{C}_1\text{-C}_{10})$ -alkoxy, $(\text{C}_5\text{-C}_{12})$ aryl alkyl, $(\text{C}_5\text{-C}_{12})$ -cycloalkyl, $(\text{C}_1\text{-C}_8)$ carbo)-alkoxy or $(\text{C}_1\text{-C}_8)$ - carbamyl group;

with the proviso that both R^1 and R^3 are not hydrogen;

or a dermatologically/cosmetically acceptable salt thereof

in admixture with a dermatologically/cosmetically acceptable carrier.

12. **(Previously presented)** A method according to claim 11, for the treatment of rosacea, cutaneous vasculitis, or actinic purpura.

13. **(Previously presented)** A method according to Claim 11, for the treatment of itching purpura, purpura annularis telangiectodes or contact allergy skin capillaritis.

14. **(Previously presented)** A method according to Claim 11, for the treatment of traumatic skin haemorrhage or actinic purpura.

15. **(Withdrawn)** A method according to claim 11, wherein R^2 , R^3 , R^4 and R^5 , each individually, represent a hydrogen atom.

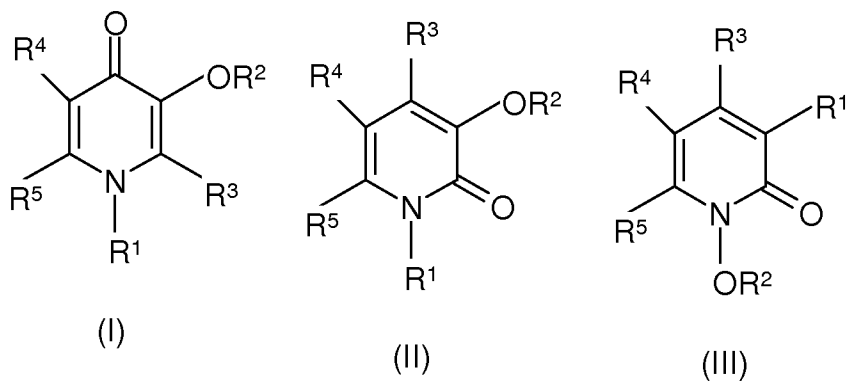
16. **(Previously presented)** A method according to claim 11, wherein R^1 and R^3 each individually, represent (C_1 - C_4)- alkyl, hydroxyalkyl or alkoxy.

17. **(Withdrawn)** A method according to claim 11, wherein said R^2 acyl group is formed by unbranched, naturally occurring caprylic acid, cupric acid, lauric acid, myristic acid, palmitic acid, palmitoleic acid, stearic acid, oleic acid, vaccenic, linoleic acid, alpha-linolenic acid, eleostearic, delta-linolenic acid, gondoic acid, dihomo- γ -linolenic acid, arachidonic acid, eicosapentaenoic acid, docosenoic acid, docosatekaenoic acid, docosapentaenoic acid, docosapentaenoic, docosahehexaenoic acid, nervonic or a mixture thereof.

18. (**Withdrawn**) A method according to claim 11, wherein said R^2 acyl is a C_{1-8} which is branched at the carbon atom adjacent to the carbonyl group.

19. (**Previously presented**) A method according to claim 11, wherein said hydroxypyridonone is 1, 2 dimethyl-3-hydroxy-4-pyridinone (deferiprone); 1,2-diethyl-3- hydroxy- 4-pyridinone; 1-methyl-2-ethyl-3-hydroxy-4-pyridinone or 1-methyl-2-(2-methoxy-ethyl)-3-hydroxy-4-pyridinone.

20. (**Currently amended**) A method for treating skin capillaritis, cutaneous vasculitis, itching purpura, purpura annularis telangiectodes, contact allergy skin capillaritis, traumatic skin hemorrhage or actinic purpura [...] comprising topically administering to a patient in need thereof a hydroxypyridonone of formulae (I-III):



wherein

R^1 represents a (C_1 - C_{10})- alkyl, (C_1 - C_{10})-alkenyl, (C_1 - C_{10})-alkoxy, (C_1 - C_{10}) hydroxyalkyl, (C_5 - C_{12}) -aralkyl, (C_3 - C_{12})-cycloalkyl, (C_1 - C_8)- carboalkoxy or (C_1 - C_8)- carbamyl, or a (C_{10} - C_{30})-peptide , or a (C_3 - C_6) polyol or monosaccharide;

R² represents an hydrogen atom or a linear or branched, saturated or unsaturated lo (C₁-C₂₂)-acyl, optionally substituted by (C₁-C₈)-alkoxy, carboxy, (C₁-C₈) alkoxycarbonyl, amino, hydroxy, said amino and hydroxy being optionally (C₁-C₂₂)-acylated or - alkylated;

R³, R⁴ and R⁵, each individually, represent a hydrogen atom, or (C₁-C₁₀)-alkyl, (C₁-C₁₀)- alkenyl, (C₁-C₁₀)-alkoxy, (C₅-C₁₂ aryl) alkyl, (C₅-C₁₂)-cycloalkyl, (C₁-C₈ carbo)-alkoxy or (C₁-C₈)- carbamyl group;

with the proviso that both R¹ and R³ are not hydrogen;

or a dermatologically/cosmetically acceptable salt thereof.